

ST. XAVIER'S COLLEGE, MAPUSA GOA

College with Potential for Excellence Reaccredited by NAAC with A Grade Awarded DBT STAR College Scheme

Noture of Front	
Nature of Event (Workshop, Guest Lecture, Add-	Webinar Series
on Course, Seminar, etc.)	webinar Series
Name of Department	Computer Science
Faculty In-Charge	Mr. Edwin D'Souza, Ms. Prajoti Chimulkar
Stratum of Event	
(College, State, Regional, National)	College
Title of Event	Basics of Rest API
THE OF EVENT	Busies of Rest III I
Data of Frank	1.2th May 2022
Date of Event	13 th May, 2022
Venue	Computer Science Lab St.Xavier's College, Mapusa
Vende	Ms. Lucia Rodrigues, Senior Software Engineer,
Resource Person details	PayNow, Web Development Group, Harare,
	Zimbabwe
Objective/Scope of Event	To write proper APIs , be aware of the tools used for
Solding Scope of Event	testing APIs.
	As part of DBT Star Scheme Alumni Webinar Series, a
Particulars of Event	webinar was conducted on the topic "Basics of Rest API" by
	our alumni student Ms. Lucia Rodrigues, Senior Software
	Engineer, PayNow, Web Development Group, Harare,
	Zimbabwe on 13 th May 2022. The webinar began with an
	introduction of the resource person by Ms. Sandra Fernandes,
	Faculty, Department of Computer Science. Ms. Lucia started
	the session with the definition of REST API as the software
	that acts as an intermediary between two systems, it exposes
	system functionality and provides standardized way for two
	applications to send data back and forth. To support the
	definition she gave a analogy of a restaurant where a Waiter
	acts s a API between the Customer/Client and the Cook/Server.
	She then moved on to give a technical example of a weather
	snippet where she said that Google is not in the business of
	weather database, yet they do so by means of an API, which

sends them the latest weather details. She then spoke about the API stakeholders as API consumers and API providers. She explained REST (Representational State Transfer) as a set of guidelines that software can use to communicate over internet in order to make integration simple and scalable. she then spoke about the REST API components (Client, Server, Resource), how the REST API work as a middleman fielding resource request and delivering responses via HTTP. She then spoke about the Client Server separation and the REST uniform interface. The went on to explain about the REST request structure – HTTP methods, endpoint, header, and body and the REST response structure – HTTP status codes, header and body. She explained each with a coding example. She then explained the REST layered structure, reasons for using REST API (Flexible, Scalable, Ease of Use). She then spoke about the common errors that occur and how to handle those errors gracefully. She explained the code on how database behind REST API can get very large and therefore, the need to filter items, sorting and pagination. She spoke about the necessity to maintain good security practices using SSL/TLS. She explained the code on how to cache data to improve performance and the importance of versioning. Finally she demonstrated the code for the TODO List REST API, which does the following:

Create endpoints that will

- Create a task POST
- Get a list of all tasks GET
- Read a particular task GET
- Delete a particular task DELETE
- Update a particular task PUT

The webinar ended a question and answer session followed by vote of thanks.

Outcome of Event	Participants are able to write and test apis using
	Express, Flask using Postman & Thunder Client
Feedback	Good.

Photographs:





